**Appendix L**

# Risk Management

Risk is the chance of injury or death to individuals and damage to or loss of vehicles and equipment. Risk, or the potential for risk, is present in every combat and training situation. Risk is mitigated through the use of risk management procedures. The primary objective of risk management is to protect combat power through accident prevention thus enabling units to win the battle quickly and decisively with minimal loss. Risk management takes place at all levels during every operation. It is an integral part of tactical planning. Radar section leaders, section chiefs, and soldiers must understand and use risk management and fratricide reduction measures to ensure that the mission is accomplished in the safest possible manner consistent with mission constraints. This appendix outlines the process used to identify and address individual hazards. It also provides a discussion of responsibilities for implementing a risk management program. Additional information about risk management is contained in FM 3-100.14 (100-14).

## SECTION I – RISK MANAGEMENT PROCEDURES

This section outlines the five steps of risk management. Leaders must always remember that the effectiveness of the process depends on situational awareness. One should never approach risk management with "one size fits all" solutions to possible hazards. Rather, in performing the steps, consider the essential tactical and operational factors that make each situation unique.

### IDENTIFY HAZARDS

A hazard is a source of danger. It is any existing or potential condition that could entail injury, illness, or death of personnel; damage to or loss of equipment and property; or some other sort of mission degradation. Tactical and training operations pose many types of hazards. Leaders' must identify the hazards associated with all aspects of the mission, paying particular attention to the factors of METT-TC. Risk management must never be an afterthought. Leaders must begin the process during their troop-leading procedures and continue it throughout the operation. Table L-1 lists possible sources of risk that a unit might face during tactical operations. The list is organized according to the factors of METT-TC.

**Table L-1. Sources of Battlefield Risks**

| Sources of Battlefield Risk |
|---|
| **Mission**<br>• Duration of the operation.<br>• Complexity/clarity of the plan. (Is the plan well-developed and easily understood?)<br>• Proximity and number of maneuvering units. |
| **Enemy**<br>• Knowledge of the enemy situation.<br>• Enemy capabilities.<br>• Availability of time and resources to conduct reconnaissance. |
| **Terrain and Weather**<br>• Visibility conditions, including light, dust, fog, rain, snow, and smoke.<br>• Precipitation and its effect on mobility.<br>• Extreme heat or cold.<br>• Additional natural hazards (broken ground, steep inclines, water obstacles). |
| **Troops**<br>• Equipment status.<br>• Experience that units conducting the operation have working together.<br>• Danger areas associated with weapon systems.<br>• Soldier/leader proficiency.<br>• Soldier/leader rest situation.<br>• Degree of acclimatization to environment.<br>• Impact of new leaders or crewmembers.<br>• Friendly unit situation.<br>• NATO or multinational military actions combined with U.S. forces. |
| **Time Available**<br>• Time available for troop-leading procedures and rehearsals by subordinates.<br>• Time available for PCCs/PCIs. |
| **Civil Considerations**<br>• Applicable ROE or rules of interaction (ROI).<br>• Potential stability operations and support operations involving contact with civilians (such as NEOs, refugee or disaster assistance, or counterterrorism).<br>• Potential for media contact and inquiries.<br>• Interaction with host nation or other participating nation support. |

## ASSESS HAZARDS TO DETERMINE RISKS

Hazard assessment is the process of determining the direct impact of each hazard on an operation (in the form of hazardous incidents). Use the following steps.

- Determine which hazards can be eliminated or avoided.
- Assess each hazard that cannot be eliminated or avoided to determine the probability that the hazard can occur.
- Assess the severity of hazards that cannot be eliminated or avoided. Severity, defined as the result or outcome of a hazardous incident, is expressed by the degree of injury or illness (including death), loss of or damage to equipment or property, environmental damage, or other

mission-impairing factors (such as unfavorable publicity or loss of combat power).

- Taking into account both the probability and severity of a hazard, determine the associated risk level (extremely high, high, moderate, and low). Table L-2 summarizes the four risk levels.

- Based on the factors of hazard assessment (probability, severity, and risk level, as well as the operational factors unique to the situation), complete the risk management worksheet. (Refer to Appendix K for a risk management worksheet.)

**Table L-2. Risk Levels and Impact on Mission Execution**

| Risk Level | Mission Effects |
|---|---|
| Extremely High (E) | Mission failure if hazardous incidents occur in execution. |
| High (H) | Significantly degraded mission capabilities in terms of required mission standards. Not accomplishing all parts of the mission or not completing the mission to standard (if hazards occur during mission). |
| Moderate (M) | Expected degraded mission capabilities in terms of required mission standards. Reduced mission capability (if hazards occur during the mission). |
| Low (L) | Expected losses have little or no impact on mission success. |

## DEVELOP CONTROLS AND MAKE RISK DECISIONS

This step is accomplished in two substeps: develop controls and make risk decisions. These substeps are accomplished during the "make a tentative plan" step of troop-leading procedures.

- Develope Controls. After assessing each hazard, develop one or more controls that will either eliminate the hazard or reduce the risk (probability, severity, or both) of potential hazardous incidents. When developing controls, consider the reason for the hazard, not just the hazard by itself.

- Make Risk Decisions. A key element in the process of making a risk decision is determining whether accepting the risk is justified or, conversely, is unnecessary. The decision-maker (commander or the unit leader, if applicable) must compare and balance the risk against mission expectations. He alone decides if the controls are sufficient and acceptable, and whether to accept the resulting residual risk. If he determines the risk is unnecessary, he directs the development of additional controls or alternative controls; as another option, he can modify, change, or reject the selected COA for the operation.

## IMPLEMENT CONTROLS

Controls are the procedures and considerations the unit uses to eliminate hazards or reduce their risk. Implementing controls is the most important part of the risk management process; this is the chain of command's contribution to the safety of the unit. Implementing controls includes coordination and communication with appropriate superior, adjacent, and subordinate units and with individuals executing the mission. Leaders must ensure that specified controls are integrated into OPLANs, OPORDs, SOPs, and rehearsals. The critical check for this step is to ensure that controls are converted into clear, simple execution orders understood at all levels. If leaders have conducted a thoughtful risk assessment, the controls will be easy to implement, enforce, and follow. Examples of risk management controls include the following:

- Brief all aspects of the mission, including related hazards and controls.
- Conduct thorough PCCs and PCIs.
- Allow adequate time for rehearsals at all levels.
- Drink plenty of water, eat well, and get as much sleep as possible (at least 4 hours in any 24-hour period).
- Use buddy teams.
- Enforce speed limits, use of seat belts, and driver safety.
- Establish recognizable visual signals and markers to distinguish maneuvering units.
- Enforce the use of ground guides in assembly areas and on dangerous terrain.
- Establish marked and protected sleeping areas in assembly areas.
- Limit single-vehicle movement.
- Establish SOPs for the integration of new personnel.

## SUPERVISE AND EVALUATE

During mission execution, leaders must ensure that risk management controls are properly understood and executed. They must continuously evaluate the unit's effectiveness in managing risks to gain insight into areas that need improvement.

- Supervision. Leadership and unit discipline are the keys to ensuring that effective risk management controls are implemented.
  - All leaders are responsible for supervising mission rehearsals and execution to ensure standards and controls are enforced. In particular, NCOs must enforce established safety policies as well as controls developed for a specific operation or task. Techniques include spot checks, inspections, SITREPs, confirmation briefs, buddy checks, and close supervision.
  - During mission execution, leaders must continuously monitor risk management controls, both to determine whether they are effective and to modify them as necessary. Leaders must also anticipate, identify, and assess new hazards. They ensure that

imminent danger issues are addressed on the spot and that ongoing planning and execution reflect changes in hazard conditions.

- Evaluation. Whenever possible, the risk management process should also include an after-action review (AAR) to assess unit performance in identifying risks and preventing hazardous situations. Leaders should then incorporate lessons learned from the process into unit SOPs and plans for future missions.

## SECTION II – IMPLEMENTATION RESPONSIBILITIES

Leaders and individuals at all levels are responsible and accountable for managing risk. They must ensure that hazards and associated risks are identified and controlled during planning, preparation, and execution of operations. The unit leader and his senior NCOs must look at both tactical risks and accident risks. The same risk management process is used to manage both types. The unit leader alone determines how and where he is willing to take tactical risks. The unit leader manages accident risks with the assistance of his platoon sergeant, NCOs, and individual soldiers.

## BREAKDOWN OF RISK MANAGEMENT PROCESS

Despite the need to advise higher headquarters of a risk taken or about to be assumed, the risk management process may break down. Such a failure can be the result of several factors; most often, it can be attributed to the following:

- The risk denial syndrome in which leaders do not want to know about the risk.
- A soldier who believes that the risk decision is part of his job and does not want to bother his unit leader or section leader.
- Outright failure to recognize a hazard or the level of risk involved.
- Overconfidence on the part of an individual or the unit in being able to avoid or recover from a hazardous incident.
- Subordinates who do not fully understand the higher commander's guidance regarding risk decisions.

## RISK MANAGEMENT COMMAND CLIMATE

Leaders provide direction, set priorities, and establish command climate (values, attitudes, and beliefs). Successful preservation of combat power requires leaders to embed risk management into individual behavior. To fulfill this commitment, one must exercise creative leadership, innovative planning, and careful management. Most importantly, one must demonstrate support for the risk management process.

Leaders and others in the unit chain of command can establish a command climate favorable to risk management integration by taking the following actions:

- Demonstrate consistent and sustained risk management behavior through leadership by example and emphasis on active participation throughout the risk management process.
- Provide adequate resources for risk management. Every leader is responsible for obtaining the assets necessary to mitigate risk and for providing them to subordinate leaders.
- Understand your own and your soldiers' limitations, as well as your unit's capabilities.
- Allow subordinates to make mistakes and learn from them.
- Prevent a "zero defects" mindset from creeping into the unit's culture.
- Demonstrate full confidence in subordinates' mastery of their trade and their ability to execute a chosen COA.
- Keep subordinates informed.
- Listen to subordinates.

Leader, subordinate leader, and individual soldier risk management responsibilities include the following:

- Make informed risk decisions. Establish and then clearly communicate risk decision criteria and guidance.
- Establish clear, feasible risk management policies and goals.
- Train the risk management process. Ensure subordinates understand the who, what, when, where, and why of managing risk and how these factors apply to their situation and assigned responsibilities.
- Accurately evaluate the unit's effectiveness, as well as subordinates' execution of risk controls during the mission.
- Inform higher headquarters when risk levels exceed established limits.